

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

NETWORK ARCHITECTURE  
INNOVATIONS LLC,

Plaintiff,

v.

CC NETWORK INC.,

Defendant.

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CIVIL ACTION NO. 2:16-CV-00914-JRG

**MEMORANDUM OPINION AND ORDER**

Before the Court is Defendant’s Motion to Dismiss for Failure to State a Claim Pursuant to Fed. R. Civ. P. 12(b)(6) (Dkt. No. 9) filed on December 1, 2016. For the reasons set forth below, the motion is **GRANTED** and the Court finds that the challenged claims of the patent-in-suit are ineligible for patent protection under 35 U.S.C. § 101.

**I. BACKGROUND**

On August 16, 2016, Plaintiff Network Architecture Innovations LLC (“NAI”) filed its Complaint against CC Network Inc. (“CC Network”), alleging infringement of U.S. Patent No. 5,974,451 (the “’451 Patent”) entitled “System and Method for Distributing Bulletins to External Computers Accessing Wide Area Computer Networks.” (Dkt. No. 1 at 2–3.) NAI alleged that CC Network has and continues to infringe “at least claims 1 and 5 of the ’451 patent by making, selling, importing and/or providing and causing to be used a network access system for appending advertisements and other bulletins to information relayed between a wide area computer network and an external computer (the ‘Accused Instrumentalities’).” (Dkt. No. 1 ¶ 15.) In response to NAI’s Complaint, CC Network filed the instant Motion seeking dismissal on the basis that the

'451 Patent is invalid under 35 U.S.C. § 101. (Dkt. No. 9.) The Court held a hearing on the instant Motion on January 30, 2017. (Dkt. No. 27.)

**A. United States Patent No. 5,974,451**

There are three main elements involved in the process of connecting a user to an internet web page: (1) the user's computer; (2) a "network access system"; and (3) a "wide area computer network." '451 Patent at 1:29–40. The Internet is considered a wide area computer network and Internet web pages are hosted on remote information servers. *Id.* at 1:13–16, 1:28–31. When a user wants to access a specific web page, the user's computer connects to a network access system, which in turn locates and connects to a remote information server that hosts data about the web page. *Id.* at 1:30–35. The remote information server then broadcasts the web page data back through the network access system and to the user's computer. *Id.* at 1:28–35.

The '451 Patent claims a system and method of using a network access system to distribute targeted bulletins (e.g., advertisements) to users accessing a wide area computer network, such as the Internet. *Id.* at 3:18–4:25. These targeted bulletins are provided by a "bulletin server" incorporated into the network access system. *Id.* at 3:47–60. In this case, when a user wants to access a specific web page, the user's computer connects to a network access system, which in turn locates and connects to a remote information server. *Id.* at 1:30–35. Before the network access system distributes the requested web page from the remote information server to the user's computer, the bulletin server determines whether a bulletin should be sent with the received information. *Id.* at 3:49–56. If so, the bulletin server selects an appropriate bulletin and the network access system sends the bulletin and the requested web page to the user's computer. *Id.* at 3:57–60.

According to the '451 Patent, at the time of the claimed invention, advertisers were having trouble targeting their intended consumer base through the Internet. '451 Patent at 1:20–27. For

example, advertisements were commonly distributed to users through remote information servers rather than the network access system. *Id.* at 1:27–30. Accordingly, such advertising could be inefficient or ineffective because remote information servers had a limited ability to accurately identify users accessing their webpages and advertisers were forced to advertise at the global level of the Internet, rather than at the local or regional level within the network access system. *Id.* at 2:30–59. For example, a user accessing a web page through a network access system in New York would have received the same advertisement as a user accessing the same web page through a network access system in Australia. *Id.* at 1:40–45. By distributing bulletins from the network access system rather than from the remote information server, advertisers can send advertisements to users based on their geographic location, among other characteristics. *Id.* at 1:35–40. In addition, distributing bulletins from network access systems allows advertisers to reach all users regardless of which remote information servers the users access. *Id.* at 4:4–8.

NAI has asserted at least Claims 1 and 5 of the '451 Patent. Although the parties dispute which claims are representative of the '451 Patent as a whole, the Court concludes that Claims 1 and 5 are representative.<sup>1</sup>

Independent Claim 1 of the '451 Patent recites:

1. A network access system for relaying information between a wide area computer network and an external computer, and for distributing at least one bulletin to said external computer, said network access system comprising:

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<sup>1</sup> For the purposes of the § 101 analysis, not every claim need be analyzed; instead, the Court may evaluate representative claims to determine whether they are “substantially similar and linked to the same abstract idea.” *Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1348–49 (Fed. Cir. 2014) (finding 242 claims invalid based on analysis of one independent claim, where the dependent claims “recite[d] little more than the same abstract idea”); *see also Phoenix Licensing, L.L.C. v. Consumer Cellular, Inc.*, No. 2:16-cv-152-JRG-RSP, 2017 WL 1065938, at \*8–9 (E.D. Tex. Mar. 8, 2017) (“The Court finds that here, as the Federal Circuit stated in the case of *Content Extraction*, the representative claims are “substantially similar” to the other claims and all of the claims are “linked to the same abstract idea.”). After review of the claims and the briefing, the Court has determined that CC Network has supported its argument that Claims 1 and 5 are representative. (Dkt. No. 16 at 8–9; Dkt. No. 18 at 7–8.) The remaining claims are all related to the abstract idea of appending bulletins to information being transmitted over a network. *See* the '451 Patent at Claims 1–9.

a first interface that couples said network access system to said wide area computer network and that receives said information from said wide area computer network;

a second interface that couples said network access system to said external computer and that transmits said information and said at least one bulletin to said external computer;

a local storage device that stores said at least one bulletin; and

a bulletin server that, in response to said first interface receiving said information from said wide area computer network, retrieves said at least one bulletin from said local storage device and transmits said at least one bulletin with said information being received by said first interface and transmitted by said second interface.

Independent Claim 5 of the '451 Patent recites:

5. A bulletin server for attaching at least one bulletin to information being relayed from a wide area computer network to an external computer, said bulletin server comprising:

storage that stores said at least one bulletin; and

attachment logic that, in response to said bulletin server receiving said information from said wide area computer network, retrieves said at least one bulletin from said storage and attaches said at least one bulletin to said information.

## **II. LEGAL STANDARD**

### **A. Motion to Dismiss**

A motion to dismiss is appropriate when a complaint fails to state a plausible claim for relief, even where all well-pleaded facts are accepted as true and viewed in the light most favorable to the plaintiff. *Bustos v. Martini Club, Inc.*, 599 F.3d 458, 461 (5th Cir. 2010); *see also Bell Atlantic Corp. v. Twombly*, 550 U.S. 544, 570, (2007). If a patent is ineligible under 35 U.S.C. § 101, then a court may dismiss a complaint asserting infringement of that patent. *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362 (Fed. Cir.), cert. denied, 136 S. Ct. 701, 193 L. Ed. 2d 522 (2015); *Voxathon LLC v. Alpine Elecs. of Am., Inc.*, No. 2:15-CV-562-JRG, 2016 WL 260350, at \*5 (E.D. Tex. Jan. 21, 2016), *aff'd sub nom. Voxathon LLC v. FCA US LLC*, No. 2016-1614, 2016 WL 7174144 (Fed. Cir. Dec. 9, 2016).

## **B. Patent Eligible Subject Matter**

“Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (internal quotation marks and brackets omitted). The Supreme Court has articulated a two-step test for “distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent eligible applications of those concepts.” *Alice Corp. Pty. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2355 (2014) (citing *Mayo*, 566 U.S. at 75-78).

The first step of the Mayo/Alice framework requires a court to determine if the claims, “considered in light of the specification . . . [and] as a whole,” are “directed to excluded subject matter.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016). There is no bright line rule that guides this analysis. Instead, the Federal Circuit and the Supreme Court have “found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases.” *Id.* at 1335.

If the claims are directed to ineligible subject matter, then the court “search[es] for an ‘inventive concept,’ or some element or combination of elements sufficient to ensure that the claim in practice amounts to ‘significantly more’ than a patent on an ineligible concept.” *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1255 (Fed. Cir. 2014); *see also Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016) (“[A]n inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces.”).

## **C. Determining Patent Eligibility Before Claim Construction**

“Where it is clear that claim construction would not affect the issue of patent eligibility, there is no requirement that the court go through that exercise before addressing the eligibility issue.” *Pres. Wellness Techs. LLC v. Allscripts Healthcare Sols.*, No. 2:15-CV-1559-WCB, 2016

WL 2742379, at \*6 (E.D. Tex. May 10, 2016) (Bryson, J.) (citing *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1274 (Fed. Cir. 2012)). Where the “‘basic character of the claimed subject matter’ in dispute is clearly evident to the Court,” no further construction of the claims is required. *Wireless Media Innovations, LLC v. Maher Terminals, LLC*, 100 F. Supp. 3d 405, 413 (D.N.J. 2015), *aff’d*, 636 Fed. Appx. 1014 (Fed. Cir. 2016).

### **III. ANALYSIS**

#### **A. The Court Does Not Need to Construe the ’451 Patent Claims Before Determining Patent Eligibility**

NAI argues that CC Network’s motion is premature because claim terms such as “first interface;” “second interface;” “bulletin server;” “attaching;” and “attachment logic” should be construed prior to the Court’s decision on this motion. (Dkt. No. 16 at 12.) The particular facts of this case indicate that the § 101 inquiry is properly addressed prior to claim construction. “Although the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter, claim construction is not an inviolable prerequisite to a validity determination under § 101.” *Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1349 (Fed. Cir. 2014) (citing *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 713–14 (Fed. Cir. 2014)). As discussed herein, the ’451 Patent claims are drawn to an abstract idea and construction of any of the claim terms would not change the “basic character of the claimed subject matter” and the ultimate § 101 analysis. *See Bancorp Servs.*, 687 F.3d at 1274.

Further, despite arguing that this matter should be deferred until after claim construction, NAI failed to explain how claim construction might alter the § 101 analysis. *See CyberFone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. Appx. 988, 991 (Fed. Cir. 2014); (Dkt. No. 16 at 12). At the hearing, NAI argued that the bulletin server functionality that is recited in the specification

is one of the claim construction issues in this case. *See* (Dkt. No. 27 at 24); '451 Patent at 3:49–57. NAI argued that “bulletin server,” as defined in the specification, would be relevant to the Court’s determination of the '451 Patent’s “inventive step.” (Dkt. No. 27 at 22.) However, even accepting the “bulletin server” functionality definition in the specification as part of the claim term, the Court finds that the claims are directed to an abstract concept.<sup>2</sup>

In light of this and the foregoing case law, the court concludes that it should proceed to determine eligibility for patent protection without delaying this decision until claim construction is complete.

### **B. The '451 Patent is Invalid under 35 U.S.C. § 101**

Following the analytical framework set forth in *Alice*, the Court addresses the questions whether the '451 Patent claims are drawn to an abstract idea and, if so, whether they embody an inventive concept.

#### *a. The '451 Patent’s claims are directed to an abstract idea*

The Court is persuaded that the claims of the '451 Patent are drawn to an abstract idea. The independent claims (Claims 1, 5, and 7) are directed to systems and methods of appending bulletins to information being transmitted over a network. The '451 Patent sought to “accurately identify the user of an external computer and, therefore optimally match available advertising to the user’s likes and dislikes” and to allow advertisers “to advertise at a local or regional level within a wide area computer network.” '451 Patent at 3:26–35. This is no different than the age-old practice of providing advertisement inserts with newspapers. As such, the claims of the '451 Patent are analogous to the method and system claims in *Intellectual Ventures I LLC v. Capital One Bank*

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<sup>2</sup> The Court similarly holds that construction of other terms would not change the basic character of the claimed subject matter. For example, while the term “attachment logic” might be subject to differing interpretations, it is abundantly clear that “logic,” as defined in the claim, is abstract in nature. *See* '451 Patent at Claim 5 (the term “attachment logic,” as defined in independent Claim 5, “retrieves said at least one bulletin from said storage and attaches said at least one bulletin to said information.”)

(USA), 792 F.3d 1363 (Fed. Cir. 2015) (“*Intellectual Ventures I*”) and *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709 (Fed. Cir. 2014), which were held to constitute “abstract ideas.” See *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334–35 (Fed. Cir. 2016) (satisfying the first step of the *Mayo/Alice* inquiry by “compar[ing] claims at issue to those claims already found to be directed to an abstract idea in previous cases.”).

NAI argues that the claimed invention is “necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks,” and accordingly, the ’451 Patent is not directed to an abstract idea. (Dkt. No.16 at 14.) However, the underlying solution claimed in the ’451 Patent is not one that addresses a problem “specifically arising in the realm of computer networks.” See *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014). The concept of pairing advertisements with content requested by the user over the Internet is not new, and is an idea that the Federal Circuit has repeatedly found as abstract.

In *Intellectual Ventures I*, for example, the Federal Circuit considered the validity of a patent that generally related to “customizing web page content as a function of navigation history and information known about the user.” 792 F.3d at 1369 (considering a representative claim that provided “[a] system for providing web pages accessed from a web site in a manner which presents the web pages tailored to” an individual user’s navigation data and “personal characteristics”). The Federal Circuit held that tailoring content based on the viewer’s location or address “is a fundamental . . . practice long prevalent in our system. . . .” *Id.* (internal quotation marks omitted). The Federal Circuit added that newspaper inserts had often been tailored based on information known about the customer. *Id.* (“[F]or example, a newspaper might advertise based on the customer’s location.”) “Providing this minimal tailoring—e.g., providing different newspaper



inserts based upon the location of the individual—is an abstract idea.” *Id.* The concept underlying the claims of the ’451 Patent is no different. The network access system and the corresponding bulletin server claimed in the ’451 Patent seek to attach targeted bulletins to information transmitted from a network, such as the Internet, back to the user’s computer. ’451 Patent at Claims 1–9; 3:18–4:25. The bulletin server uses the data from the user’s information request, as well as any archived personal information about the user, to determine whether an advertisement should be attached to the corresponding website or requested information that the user’s computer receives. *Id.* at 5:31–63 (“[T]he bulletin server looks at data such as the content, format, and destination of the piece of information and other data stored in the bulletin server (e.g., user’s address, age, gender, occupation, race, income, ethnicity, national origin, religion, education level, personal interests, etc., or user’s profile data) to determine which bulletin to select.”). Tailoring an advertisement that considers the demographic of its audience and tailors the advertisement presented to the user based on that information is a “fundamental practice long prevalent in our system.” *Intellectual Ventures I*, 792 F.3d at 1370.

NAI argues that the claimed invention of the ’451 Patent teaches an “improvement in network architecture,” but the claims “merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet.” *DDR Holdings, LLC v. Hotels.com*, 773 F.3d 1245, 1257 (Fed. Cir. 2014); (Dkt. No. 16 at 15). In *DDR Holdings*, the Federal Circuit held that claims reciting a specific way to “retain . . . visitor traffic by displaying . . . product information from within a generated web page that ‘gives the viewer of the page the impression that she is viewing pages served by the host’ website” are not directed to an abstract idea. *Id.* at 1249. The Federal Circuit explained that “these claims stand apart because they do not merely recite the performance of some business practice known from the pre-Internet

world along with the requirement to perform it on the Internet.” *Id.* at 1257. The Court found that the claimed solution, retaining website visitors that would otherwise be instantly transported away from a host’s website after “clicking” on an advertisement and activating a hyperlink, “is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” *Id.* The Federal Circuit distinguished these claims from the abstract idea of “offering media content in exchange for viewing an advertisement.” *Id.* at 1258 (noting that “routine additional steps such as updating an activity log, requiring a request from the consumer to view the ad, restrictions on public access, and use of the Internet” did not render the claims patent-eligible). The ’451 Patent does not disclose a new network access system or server. The claimed “bulletin server” does not have the capability to perform any functions that a generic server would otherwise be unable to perform. *Id.* at 5:15–6:14. Rather, according to the ’451 Patent specification, the bulletin server is simply a server that monitors information relayed to the user’s computer and determines whether a bulletin should be appended to that piece of information. *Id.* This is not an improvement in computer functionality. This is an application of appending targeted advertisements to the information that consumers receive. *See* ’451 Patent at 3:18–46. Accordingly, the Court finds that the ’491 Patent claims are directed to an abstract idea, not towards an improvement to computer functionality itself. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016).

*b. The ’451 Patent claims do not recite an inventive concept*

Having found that the ’491 Patent claims are directed to an abstract idea, the Court now examines the limitations of the claims to determine whether there is an “inventive concept” to “transform” the claimed abstract idea into patent-eligible subject matter. *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2357 (2014).

NAI argues that the “bulletin server” and the “ordered combination of elements” constitute the inventive concept of the ’451 Patent. (Dkt. No. 16 at 9–10; Dkt. No. 27 at 22.) However, as discussed above, the ’451 Patent does not claim a new type of server. Rather, the bulletin server is a generic server that “stores a plurality of bulletins . . . , determines whether to send a bulletin with the information being transmitted, determines what bulletins to transmit to the external computers, and sends the bulletins with the information being transmitted . . . to the external computers.” ’451 Patent at Abstract. At the recent hearing, NAI asserted that the specification does talk about what the bulleting server does, however, the language that NAI discussed does not suggest an “inventive concept.” See ’451 Patent at 3:49–57 (“The bulletin server distributes bulletins by sending bulletins with information being relayed . . . to external computers. More particularly, when information is received at the network access system . . . the bulletin server first determines whether a bulletin is to be sent with the received information . . . .”). Steps that simply spell out what it means to “apply it on a computer” cannot confer patent-eligibility. *Alice*, 134 S. Ct. at 2359. “Requiring the use of a ‘software’ ‘brain’ ‘tasked with tailoring information and providing it to the user’ provides no additional limitation beyond applying an abstract idea, restricted to the Internet, on a generic computer.” *Intellectual Ventures I*, 792 F.3d at 1371.

Additionally, even if the bulletin server is a “non-routine” component to the abstract idea, that alone is not enough to transform the abstract idea into a patent eligible concept. In *Ultramercial*, for example, the Federal Circuit held that “[t]he process of receiving copyrighted media, selecting an ad, offering the media in exchange for watching the selected ad, displaying the ad, allowing the consumer access to the media, and receiving payment from the sponsor of the ad” describes an abstract idea, “devoid of a concrete or tangible application.” *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014). The Federal Circuit noted that while certain

additional limitations, such as consulting an activity log, add a degree of particularity, the underlying concept describes only the abstract idea of showing an advertisement before delivering content to the user. *Id.* at 715. Here, the bulletin server does not change the underlying abstract idea of appending advertisements to information transmitted over a network into something patentable. *See also Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017) (“Thus, the patent’s recitation of XML documents specifically, does little more than restrict the invention’s field of use. Such limitations do not render an otherwise abstract concept any less abstract.”); *Ultramercial*, 772 F.3d at 715.<sup>3</sup>

Finally, the “ordered combination” of the claimed components does not transform the abstract idea because “the claims simply instruct the practitioner to implement the abstract idea with routine, conventional activity.” *Id.* This Court has not ignored “the claims as an ordered combination” and the “requirements of the individual steps.” *See McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016) (holding that using “unconventional rules that relate to sub-sequences of phonemes, timings, and morph weight sets, is not directed to an abstract idea”). However, the timing of appending a bulletin after the information has been sent by the remote information server but before it has been received by the user is not unique. As discussed earlier, this interception strategy parallels “providing different newspaper inserts based upon the location of the individuals,” all through the use of conventional computer components. *See Intellectual Ventures I*, 792 F.3d at 1369. This combination of elements does not confer patent eligibility.

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<sup>3</sup> NAI also argues that the ’451 Patent is not invalid under § 101 because the claims “do[] not, wholly or partially, preempt the allegedly abstract idea state by Defendant.” (Dkt. No. 16 at 11–12.) To the extent that preemption is relevant to the § 101 analysis, it is a concern, not a determinative fact on patent eligibility. *See Mayo Collaborative Servs. V. Prometheus Labs., Inc.*, 566 U.S. 66, 85–86 (2012) (noting that the Supreme Court has repeatedly emphasized “a concern that patent law not inhibit future discovery by improperly tying up the use of laws of nature.”); *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (“While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.”).

The Court finds that an inventive concept adequate to transform the claimed abstract idea of appending bulletins (i.e., advertisements) to information being transmitted over a network into a patent-eligible invention is ultimately lacking in this case.

#### **IV. CONCLUSION**

For the reasons set forth above, the Court finds that the '415 Patent is ineligible for patent protection under 35 U.S.C. § 101. As such, the complaint has failed to “state a claim to relief that is plausible on its face.” *Twombly*, 550 U.S. at 570. Accordingly, the Court **GRANTS** Defendant’s Motion to Dismiss (Dkt. No. 9) and Plaintiff’s Complaint is **DISMISSED WITH PREJUDICE**. All other motions or matters remaining in this case that are presently unresolved are **DENIED AS MOOT**. The Clerk is directed to **CLOSE** this case.

**So ORDERED and SIGNED this 18th day of April, 2017.**

  
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RODNEY GILSTRAP  
UNITED STATES DISTRICT JUDGE